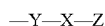


wherein:

$X_1$ ,  $X_2$  and  $X_3$  are either all carbon atoms or one of  $X_1$ ,  $X_2$  and  $X_3$  is a nitrogen atom;

$n$  is 0 or 1;

$R_1$  is a substituent group selected from hydrogen, halo, cyano, nitro, hydroxy or a group of the formula:



wherein

$Y$  is absent or a (1-2C)alkylene;

$X$  is absent or  $-O-$ ,  $-C(O)-$ ,  $-C(O)O-$ ,  $-OC(O)-$ ,  $-N(R^{43})-$ ,  $-N(R^{43})-C(O)-$ ,  $-N(R^{43})-C(O)O-$ ,  $-C(O)-N(R^{43})-$ ,  $-N(R^{43})C(O)N(R^{43})-$ ,  $-SO_2-$ ,  $-S(O)_2N(R^{43})-$ , or  $-N(R^{43})SO_2-$  wherein  $R^{43}$  is selected from hydrogen or (1-2C)alkyl; and

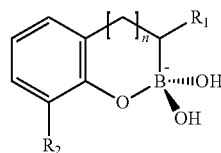
$Z$  is hydrogen, (1-6C)alkyl, (2-6C)alkenyl, (2-6C)alkynyl, aryl, (3-6C)cycloalkyl, (3-6C)cycloalkenyl, heteroaryl or heterocyclyl;

and wherein  $Z$  is optionally further substituted by one or more substituent groups independently selected from oxo, halo, cyano, nitro, hydroxy, carboxy,  $NR^{46}R^{47}$ ,  $-(CR^{44}R^{45})_p-NR^{46}R^{47}$  (wherein  $p$  is selected from 1, 2 or 3), (1-4C)alkoxy, (1-4C)alkyl, (3-8C)cycloalkyl, (3-8C)cycloalkyl-(1-3C)alkyl, (1-4C)alkanoyl, aryl, aryloxy, heterocyclyl, heterocyclyl-(1-2C)alkyl, heteroaryl or heteroaryl-(1-2C)alkyl; wherein  $R^{44}$  and  $R^{45}$  are each independently selected from hydrogen or (1-4C)alkyl; and wherein  $R^{46}$  and  $R^{47}$  are each independently selected from hydrogen, (1-4C)alkyl, (1-4C)alkyl amino, (3-6C)cycloalkyl or (3-6C)cycloalkyl(1-2C)alkyl; or  $R^{46}$  and  $R^{47}$  can be linked such that, together with the nitrogen atom to which they are attached, they form a 4-6 membered heterocyclic ring; and

$R_2$  is a substituent group selected from hydrogen, halo, cyano, nitro, hydroxy or  $R_2$  is selected from:

- (i)  $-C(O)OR_{2A}$ , wherein  $R_{2A}$  is selected from hydrogen, (1-6C)alkyl, (3-8C)cycloalkyl, (3-8C)cycloalkyl(1-2C)alkyl, aryl, aryl-(1-2C)alkyl, heteroaryl, heteroaryl-(1-2C)alkyl, heterocyclyl or heterocyclyl-(1-2C)alkyl, each of which is optionally substituted by one or more substituent groups selected from oxo, halo, cyano, nitro, hydroxy, carboxy, amino, (1-4C)alkoxy, (1-4C)alkyl, or (1-4C)alkanoyl; or
- (ii)  $-C(O)NR_{2B}R_{2C}$ ; wherein  $R_{2B}$  and  $R_{2C}$  are each independently selected from hydrogen, (1-6C)alkyl, (3-8C)cycloalkyl, (3-8C)cycloalkyl(1-2C)alkyl, aryl, aryl-(1-2C)alkyl, heteroaryl, heteroaryl-(1-2C)alkyl, heterocyclyl or heterocyclyl-(1-2C)alkyl, each of which is optionally substituted by one or more substituent selected from oxo, halo, cyano, nitro, hydroxy, carboxy, amino, (1-4C)alkoxy, (1-4C)alkyl, or (1-4C)alkanoyl.

6. A combination product according to claim 1, wherein the  $\beta$ -lactamase inhibitor is a compound of Formula Ic, shown below:



Formula Ic

wherein:

$n$  is 0 or 1;

$R_1$  is a substituent group selected from hydrogen, halo, cyano, nitro, hydroxy or a group of the formula:



wherein

$X$  is  $-OC(O)-$ ,  $-N(R^{43})-C(O)-$  or  $-C(O)-N(R^{43})-$ , wherein  $R^{43}$  is selected from hydrogen or (1-2C)alkyl; and

$Z$  is hydrogen, (1-6C)alkyl, aryl, (3-6C)cycloalkyl, (3-6C)cycloalkenyl, heteroaryl or heterocyclyl;

and wherein  $Z$  is optionally further substituted by one or more substituent groups independently selected from oxo, halo, cyano, nitro, hydroxy, carboxy,  $NR^{46}R^{47}$ ,  $-(CR^{44}R^{45})_p-NR^{46}R^{47}$  (wherein  $p$  is selected from 1, 2 or 3), (1-4C)alkoxy, (1-4C)alkyl or (1-4C)alkanoyl; wherein  $R^{44}$  and  $R^{45}$  are each independently selected from hydrogen or (1-4C)alkyl; and  $R^{46}$  and  $R^{47}$  are each independently selected from hydrogen, (1-4C)alkyl, (1-4C)alkylamino, (3-6C)cycloalkyl or (3-6C)cycloalkyl(1-2C)alkyl; or  $R^{46}$  and  $R^{47}$  can be linked such that, together with the nitrogen atom to which they are attached, they form a 4-6 membered heterocyclic ring;

$R_2$  is a substituent of the formula  $-C(O)OR_{2A}$ , wherein  $R_{2A}$  is selected from hydrogen, (1-6C)alkyl, (3-8C)cycloalkyl, (3-8C)cycloalkyl(1-2C)alkyl, aryl, aryl-(1-2C)alkyl, heteroaryl, heteroaryl-(1-2C)alkyl, heterocyclyl or heterocyclyl-(1-2C)alkyl, each of which is optionally substituted by one or more substituent groups selected from oxo, halo, cyano, nitro, hydroxy, carboxy, amino, (1-4C)alkoxy, (1-4C)alkyl or (1-4C)alkanoyl.

7. A combination therapeutic product according to claim 1, wherein the  $\beta$ -lactamase inhibitor is selected from one of the following compounds, or a pharmaceutically acceptable salt thereof:

